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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,606	08/25/2003	Richard Harvey	063170.6701	4231
5073 7590 11/15/2010 BAKER BOTTS L.L.P.				IINER
2001 ROSS AV	ENUE		LEWIS, ALICIA M	
SUITE 600 DALLAS, TX 75201-2980			ART UNIT	PAPER NUMBER
			2164	
			NOTIFICATION DATE	DELIVERY MODE
			11/15/2010	ELECTRONIC

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/648,606 Filing Date: August 25, 2003 Appellant(s): HARVEY ET AL.

Luke Pedersen (Reg. No. 45,003) For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed August 26, 2010 appealing from the Office action mailed February 23, 2010.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1-5 and 8-10 are pending in the application and stand rejected.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

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(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

2004/0002955	Gadbois et al.	01-2004
7,200,869	Hacherl et al.	04-2007
2004/0204958	Perkins et al.	10-2004
7,296,061	Martinez et al.	11-2007
2004/0213409	Murto et al.	10-2004

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(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gadbois et al. (US Patent Application Publication 2004/0002955 A1) ('Gadbois') in view of Hacherl et al. (US 7,200,869 B1, filing date 09/15/2000) ('Hacherl').

With respect to claim 1, Gadbois teaches a web services directory comprising: a computer readable medium (paragraph 8); and

a processor, the processor configured to execute a program of instructions encoded on the computer-readable medium, the program of instructions comprising (paragraphs 5 and 21):

a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry (paragraphs 21 and 39) in a Lightweight Directory Access Protocol (LDAP) directory (paragraphs 24 and 26), the directory module operable to:

generate at least one business entity object in the LDAP directory based on a UDDI Business Entity element(elements 232, 242, 252 in Figure 2, paragraphs 28-29);

generate at least one user object in the LDAP directory, wherein the at least one business entity object is arranged under the at least one user object in the LDAP directory (elements 222 and 224 in Figure 2, paragraphs 27 and 28); receive a UDDI registry query (paragraphs 32 and 35); and generate a UDDI response based on data in the at least one Business Entity object and the at least one User object in the LDAP directory (paragraphs 36, 44-46, 49 and 53).

Although Gadbois teaches that a repository stores access privileges (paragraph 24), he does not explicitly teach a user object based on an account, wherein the at least one user object comprises security information defining what objects a user has access to in a hierarchical directory, and wherein the at least one user object grants access to the user based on the security information.

Hacherl teaches a system and method for protecting domain data against unauthorized modification (see abstract), in which he teaches a user object based on an account (column 6 lines 30-30), wherein the at least one user object comprises security information defining what objects a user has access to in a hierarchical directory (column 6 lines 30-36, column 9 lines 14-39), and wherein the at least one user object grants access to the user based on the security information (column 10 lines 26-28).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Gadbois by the teaching of Hacherl because wherein the at least one user object comprises security information defining what objects a user has access to in a hierarchical directory, and wherein the at least one user object grants access to the user based on the security information would enable secure access to shared objects and resources (Hacherl, column abstract; Gadbois, paragraph 24).

With respect to claim 2, Gadbois as modified teaches the web services directory as recited in claim 1, the directory further operable to:

generate at least one business service object (Gadbois, element 243 in Figure 2, paragraph 28); and

generate at least one binding template object (Gadbois, element 245 in Figure 2, paragraph 28), wherein the at least one business service object is arranged under the at least one business entity object, and the at least one binding template object is arranged under the at least one business service object (Gadbois, Figure 2).

With respect to claim 3, Gadbois as modified teaches the web services directory as recited in claim 1, wherein the at least one business entity object is arranged under the at least one user object by virtue of at least one corresponding user child object (Gadbois, elements 222, 232, 242 and 252 in Figure 2, paragraphs 26-28).

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With respect to claim 4, Gadbois as modified teaches the web services directory as recited in claim 1, the directory module further operable to generate at least one domain object, wherein the at least one user object is arranged under the at least one domain object (Gadbois, elements 170 and 210 in Figure 2, paragraph 24, paragraph 26, paragraph 27 lines 1-4).

With respect to claim 5, Gadbois as modified teaches the web services directory as recited in claim 1, further comprising apparatus adapted to implement the web services directory, and in which directory services are invoked (Gadbois, paragraphs 21-25).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins et al. (US 2004/0204958 A1, priority date 8/30/2000) ('Perkins') in view of Martinez et al. (US 7,296,061 B2, filing date 11/21/2001) ('Martinez') and further in view of Gadbois et al. (US Patent Application Publication 2004/0002955 A1) ('Gadbois').

With respect to claim 8, Perkins teaches a web services system (abstract) comprising:

a registry in which businesses may register, the registry comprising a directory module (paragraphs 9 and 35), the directory module operable to:

generate at least one domain object (*i.e. web domain*) (paragraphs 40, 55 and 61), wherein the at least one domain object comprises a directory prefix

name (paragraph 33), and the at least one domain object is a root object of the hierarchal directory (paragraph 61);

generate at least one user object (*i.e.* cooperate user) (paragraph 61), wherein the at least one user object identifies a user account for managing at least one business entity object (paragraph 63) arranged under the at least one user object (paragraphs 65-66), and the at least one user object is arranged under the at least one domain object (paragraph 61), wherein the at least one business entity object comprising at least one business name and at least one business contact (paragraphs 61 and 62), the at least one business contact comprising at least one business address (paragraphs 61 and 62);

receive a registry query (paragraph 71);

generate a response based on data in the at least one domain object and the at least one user object in the directory (paragraphs 71-73); and a storage system for storing business information and accessible via the directory (paragraph 76).

Although Perkins teaches that users create login profiles (paragraph 65) and a user accessing objects in a hierarchical directory (paragraph 35), he does not explicitly teach wherein the at least one user object comprises security information defining what objects a user has access to in the directory, and wherein the at least one user object grants access to the user based on the security information.

Martinez teaches a distributed web services network architecture (see abstract), in which he teaches wherein the at least one user object comprises security information defining what objects a user has access to, and wherein the at least one user object grants access to the user based on the security information (column 7 lines 44-60, column 10 lines 47-52).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Gadbois by the teaching of Martinez because wherein the at least one user object comprises security information defining what objects a user has access to, and wherein the at least one user object grants access to the user based on the security information would enable secure access to network objects and resources (Martinez, column 10 lines 47-52).

Further regarding claim 8, Perkins in view of Martinez fails to teach a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry in a Lightweight Directory Access Protocol (LDAP) directory.

Gadbois teaches a registry service (see abstract), in which he teaches a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry (paragraphs 21 and 39) in a Lightweight Directory Access Protocol (LDAP) directory (paragraphs 24 and 26).

It would have been obvious to a persona having ordinary skill in the art at the time the invention was made to have further modified Perkins by the teaching of Gadbois because a directory module that implements a Universal Description,

Discovery, and Integration (UDDI) registry in a Lightweight Directory Access Protocol (LDAP) directory would enable an efficient means of recording and managing publisher assertions and relationships between businesses (Gadbois, abstract).

Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins et al. (US 2004/0204958 A1, priority date 8/30/2000) ('Perkins') in view of Hacherl et al. (US 7,200,869 B1, filing date 09/15/2000) ('Hacherl'), and further in view of Murto et al. (US Patent Application Publication 2004/0213409 A1) ('Murto').

With respect to claim 8, Perkins teaches a web services system (abstract) comprising:

a registry in which businesses may register, the registry comprising a directory module (paragraphs 9 and 35), the directory module operable to:

generate at least one domain object (*i.e.* web domain) (paragraphs 40, 55 and 61), wherein the at least one domain object comprises a directory prefix name (paragraph 33), and the at least one domain object is a root object of the directory (paragraph 61);

generate at least one user object (*i.e. cooperate user*) (paragraph 61), wherein the at least one user object identifies a user account for managing at least one business entity object (paragraph 63) arranged under the at least one user object (paragraphs 65-66), and the at least one user object is arranged under the at least one domain object (paragraph 61), wherein the at least one business entity object

comprising at least one business name and at least one business contact (paragraphs 61 and 62), the at least one business contact comprising at least one business address (paragraphs 61 and 62);

receive a registry query (paragraph 71);

generate a response based on data in the at least one domain object and the at least one user object in the directory (paragraphs 71-73); and a storage system for storing business information and accessible via the directory (paragraph 76).

Although Perkins teaches that users create login profiles (paragraph 65), he does not explicitly teach a Lightweight Directory Access Protocol (LDAP) directory, or wherein the at least one user object comprises security information defining what objects a user has access to in the hierarchical directory, and wherein the at least one user object grants access to the user based on the security information.

Hacherl teaches a system and method for protecting domain data against unauthorized modification (see abstract), in which he teaches Lightweight Directory Access Protocol (LDAP) directory (column 5 lines 10-15), wherein the at least one user object comprises security information defining what objects a user has access to in the hierarchical directory (column 6 lines 30-36, column 9 lines 14-39), and wherein the at least one user object grants access to the user based on the security information (column 10 lines 26-28).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Perkins by the teaching of Hacherl because wherein the at least one user object comprises security information defining what objects a user has access to in a hierarchical directory, and wherein the at least one user object grants access to the user based on the security information would enable secure access to shared objects and resources (Hacherl, column abstract).

Further regarding claim 8, Perkins in view of Hacherl fails to teach a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry.

Murto teaches a service discovery access to user location (see abstract), in which he teaches a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry (paragraph 12, abstract).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have further modified Perkins by the teaching of Murto because a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry would enable a UDDI registry defined in an XML schema of hierarchical relationships to be used for describing business information service information, binding information and information about specifications and services (Murto, paragraph 59). Furthermore, the combination would enable geographically focuses UDDI search, and thus provide a user with business/service information in a region or location relating to the user's location (Murto, paragraphs 11-12).

With respect to claim 9, Perkins as modified teaches the system of claim 8, the directory module further operable to:

generate at least one business service object, wherein the at least one business service object comprises data identifying a technical service (*i.e. piano repair*), and the at least one business service object is arranged under the at least one business entity object (Perkins, Figs. 6B and 6C, paragraphs 56-57; Murto, paragraphs 53-54, 59 and 61); and

generate at least one binding template object, wherein the at least one binding template object comprises data identifying a plurality of service specifications, and the at least one binding template object is arranged under the at least one business service object (Murto, paragraphs 54-55, 59 and 62).

With respect to claim 10, Perkins as modified teaches the web services directory as recited in claim 9, the hierarchical directory module further operable to generate at least one tmodel object, wherein the at least one tmodel object comprises a keyed reference to the at least one binding template object (Murto, paragraphs 55-56, 59 and 63), and the at least one tmodel object is arranged under the at least one user object (Murto, paragraphs 53-56; Perkins, paragraphs 61-62) (*Perkins teaches that a business entity is arranged under a user object. Murto teaches that a tmodel object has a reference to the binding template object, and further that a tmodel object is arranged under a business entity.*)

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(10) Response to Argument

I. The alleged Gadbois-Hacherl combination fails to teach or suggest all limitations of Claim 1

The appellant argues that Gadbois fails to teach a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry in a Lightweight Directory Access Protocol (LDAP) directory. The Examiner respectfully disagrees. Gadbois teaches a registry service, such as a UDDI business registry (paragraph 21). He further teaches that a directory server provides a database for storing registry service (such as UDDI business registry) information (paragraph 23), and that one such directory server that can be used to store registry service is a LDAP directory (paragraphs 24 and 26). Therefore, Gadbois teaches a UDDI registry in a LDAP directory.

II. The alleged Perkins-Martinez-Gadbois combination fails to teach or suggest all limitations of Claim 8

Similar to the rejection of claim 1, the Appellant again argues that Gadbois fails to teach a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry in a Lightweight Directory Access Protocol (LDAP) directory. The Examiner respectfully disagrees. Gadbois teaches a registry service, such as a UDDI business registry (paragraph 21). He further teaches that a directory server provides a database for storing registry service (such as UDDI business registry) information (paragraph 23), and that one such directory server that can be used to store

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registry service is a LDAP directory (paragraphs 24 and 26). Therefore, Gadbois teaches a UDDI registry in a LDAP directory.

III. The alleged Perkins-Hacherl-Murto combination fails to teach or suggest all limitations of Claim 8

The appellant argues that Murto fails to teach a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry in a Lightweight Directory Access Protocol (LDAP) directory. However, the Appellant cannot show non-obviousness by arguing the references individually; Murto is not used alone to teach the above limitation. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Perkins teaches a directory module (paragraphs 9 and 35), but does not teach a LDAP directory. Hacherl teaches a LDAP directory (column 5 lines 10-15). Although Perkins in view of Hacherl teaches a LDAP directory module, the Examiner admits that Perkins in view of Hacherl fails to teach a directory module that implements a UDDI registry. Murto teaches a directory module that implements a UDDI registry (paragraph 12 and abstract). Therefore, the combination of Perkins, Hacherl and Murto teaches a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry in a Lightweight Directory Access Protocol (LDAP) directory.

The appellant further argues that the cited references fail to teach a registry in which businesses may register...comprising...at least one user object, wherein...the at least one user object comprises security information defining what objects a user has access to in the hierarchical directory. For example, the Appellant argues that Hacherl fails to teach a user object in a registry in which businesses may register. However, the Examiner never asserts that Hacherl teaches a registry in which businesses may register, as this limitation is taught by Perkins (paragraphs 9 and 35). Perkins also teaches a user object that identifies a user account (paragraph 61). The Appellant incorrectly argues that the Examiner concedes that Perkins does not teach these limitations.

The examiner does concede that Perkins does not teach that the user object comprises security information defining what objects a user has access to in the hierarchical directory. Hacherl is used to teach this limitation. Hacherl teaches a user object comprising security information defining what objects a user has access to in the hierarchical directory (column 6 lines 30-36, column 9 lines 14-39). Therefore, the combination of Perkins and Hacherl teaches a registry in which businesses may register...comprising...at least one user object, wherein...the at least one user object comprises security information defining what objects a user has access to in the hierarchical directory.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208

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USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

IV. The alleged Perkins-Hacherl-Murto combination fails to teach or suggest all limitations of Claim 9

The appellant argues that Murto fails to teach at least one Binding Template object, wherein the at least one Binding Template object comprises data identifying a plurality of service specifications. The examiner respectfully disagrees. Murto teaches that binding template objects are arranged under business service objects (paragraphs 54-55 and 59). He further teaches that binding template objects contain the detailed technical descriptions of web services and provide the technical entry point URL for specific services and products offered by a business (paragraph 62). The technical descriptions of web services clearly represent data identifying a plurality of service specifications, and thus Murto teaches at least one Binding Template object, wherein the at least one Binding Template object comprises data identifying a plurality of service specifications.

V. The alleged Perkins-Hacherl-Murto combination fails to teach or suggest all limitations of Claim 10

The appellant argues that Murto fails to teach at least one TModel object, wherein the at least one TModel object comprises a keyed reference to the at least one Binding Template object, and the at least one TModel object is arranged under the at

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least one user object. The Examiner respectfully disagrees. Murto teaches a TModel object, which is pointed to by a pointer in the binding template object (paragraph 63). The pointer between the Tmodel object and binding template object represents a keyed reference to the binding template object. Murto further teaches that the Tmodel object is arranged under a business entity (paragraphs 53-56). Perkins teaches that a business entity is arranged under a user object (paragraphs 61-62). Therefore, the combination of Perkins and Murto teaches at least one TModel object, wherein the at least one TModel object comprises a keyed reference to the at least one Binding Template object, and the at least one TModel object is arranged under the at least one user object.

VI. The alleged Gadbois-Hacherl combination fails to teach or suggest all limitations of Claims 2-5

The appellant argues that claims 2-5 are allowable at least because the claims depend from claim 1, which the Appellant believes to be allowable. However, as argued above in section I, the Examiner does not believe claim 1 is in condition for allowance, as Gadbois in view of Hacherl teaches the limitations of claim 1. As such, claims 2-5 are not allowable based on their dependence on claim 1.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/A. M. L./ Examiner, Art Unit 2164 November 1, 2010

Conferees:

/Charles Rones/

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